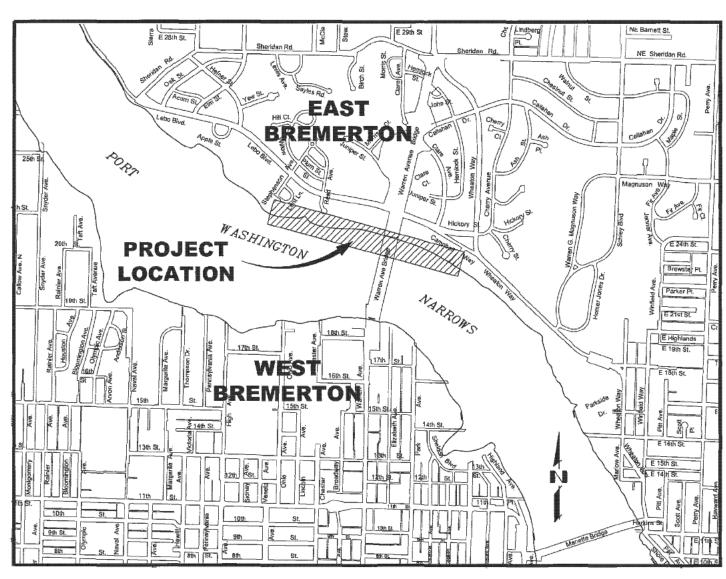


# CITY OF BREMERTON

**DEPARTMENT OF PUBLIC WORKS AND UTILITIES** 

# EASTSIDE BEACH MAIN REPLACEMENT

CITY PROJECT #: 5325



## **SHEET INDEX**

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## SITE LOCATION MAP

N.T.S.

NED LEVER, P.E.
MANAGING ENGINEER

APPROVED BY:

TOM KNUCKEY, P.E.

CITY ENGINEER

**MARCH 2013** 

JOHN 3/15 NO.

REVISIONS
DESCRIPTION
DATE BY
TWO INCHES AT FULL SCALE IF NOT SCALE ACCORDINGLY
SCALE

JLL SCALE ORDINGLY

DRAWNG NO. DRAWN BY: 7H

CITY OF BREMERTON
DEPARTMENT OF PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

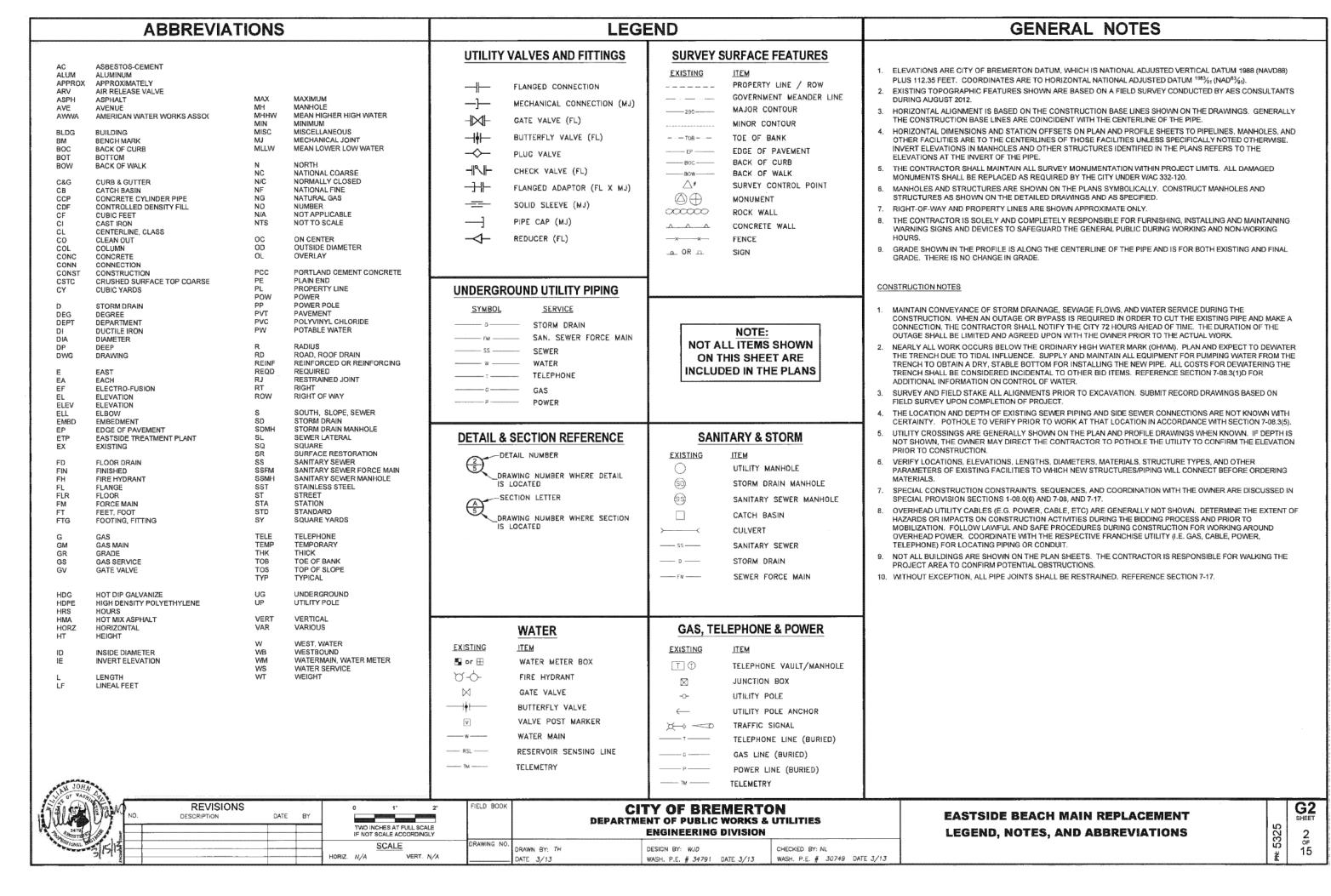
DESIGN BY: WAD CHECKED BY: NA.

WASH. P.E. # 34791 DATE 3/13

WASH. P.E. # 30749 DATE 3/13

EASTSIDE BEACH MAIN REPLACEMENT
COVER SHEET

G1 SHEET 1 of 15



| PIPE    | CENTERLINE C | ONTROL POINTS | AND ELEVAT | IONS    |
|---------|--------------|---------------|------------|---------|
| STATION | NORTHING     | EASTING       | SURFACE    | PIPE IE |
| 1+00    | 1194867.80   | 217588.02     | 119.90     | 113.23  |
| 1+75    | 1194940.24   | 217568.59     | 119.90     | 112.93  |
| 2+50    | 1195013.95   | 217555.46     | 119.20     | 112.63  |
| 3+25    | 1195088.50   | 217547.18     | 119.00     | 112.33  |
| 4+25    | 1195188.01   | 217537.36     | 118.40     | 111.08  |
| 4+75    | 1195237.86   | 217537.36     | 117.70     | 110.46  |
| 5+25    | 1195287.70   | 217530.65     | 116.30     | 109.40  |
| 5+75    | 1195336.35   | 217520.36     | 116.20     | 108.32  |
| 6+25    | 1195378.10   | 217500.06     | 113.30     | 107.24  |
| 6+75    | 1195417.60   | 217469.53     | 114.40     | 106.77  |
| 7+25    | 1195458.20   | 217443.71     | 114.80     | 106.91  |
| 7+75    | 1195507.14   | 217428.68     | 115.40     | 107.06  |
| 8+25    | 1195555.92   | 217417.67     | 119.90     | 107.20  |
| 8+75    | 1195605.23   | 217409.41     | 116.30     | 107.34  |
| 9+50    | 1195679.02   | 217395.92     | 115.00     | 107.55  |
| 10+50   | 1195777.80   | 217380.36     | 115.10     | 107.84  |
| 11+50   | 1195877.23   | 217370.39     | 114.90     | 108.12  |
| 12+50   | 1195977.19   | 217371.29     | 115.80     | 108.41  |
| 13+25   | 1196052.02   | 217376.00     | 114.90     | 108.62  |
| 14+00   | 1196126.69   | 217377.35     | 114.60     | 108.84  |
| 14+75   | 1196200.53   | 217368.46     | 115.10     | 109.39  |
| 15+25   | 1196250.78   | 217362.76     | 116.90     | 110.23  |
| 15+75   | 1196300.15   | 217354.87     | 120.00     | 111.07  |
| 16+25   | 1196346.42   | 217238.08     | 120.50     | 111.92  |
| 18+25   | 1196529.61   | 217257.84     | 118.70     | 112.88  |
| 19+00   | 1196600.60   | 217233.73     | 121.50     | 114,33  |
| 19+75   | 1196674.21   | 217220.12     | 118.30     | 112.05  |
| 20+50   | 1196746.57   | 217200.41     | 116.20     | 110.06  |
| 21+25   | 1196818.54   | 217179.37     | 114.90     | 109.34  |
| 22+00   | 1196889.38   | 217154.75     | 114.80     | 109.06  |
| 23+00   | 1196983.22   | 217120.19     | 115.10     | 108.67  |
| 24+00   | 1196076.35   | 217083.94     | 114.80     | 108.29  |
| 25+00   | 1197166.13   | 217039.91     | 114.70     | 107.92  |
| 26+00   | 1197255.16   | 216994.68     | 114.40     | 107.62  |
| 27+00   | 1197341.59   | 216944.58     | 115.10     | 107.16  |
| 27+50   | 1197384.13   | 216918.26     | 115.20     | 106.97  |
| 28+00   | 1197449.72   | 216882.09     | 115.20     | 106.77  |
| 29+00   | 1197514.77   | 216844.76     | 115.20     | 108.17  |
| 29+75   | 1197579.38   | 216806.80     | 115.90     | 109.05  |
| 30+50   | 1197639.87   | 216762.46     | 115.90     | 109.56  |
| 30+82   | 1197665.00   | 216743.55     | 116.20     | 109.80  |
|         |              |               |            |         |
|         |              |               |            |         |
|         |              |               |            |         |

| EXISTING S | EXISTING SURVEY CONTROL POINTS |           |  |  |  |  |
|------------|--------------------------------|-----------|--|--|--|--|
| NUMBER     | NORTHING                       | EASTING   |  |  |  |  |
| 6          | 1194833.49                     | 217579.41 |  |  |  |  |
| 7          | 1195853.88                     | 217276.60 |  |  |  |  |
| 8          | 1195587.24                     | 217276.08 |  |  |  |  |
| 9          | 1195332.75                     | 217628.77 |  |  |  |  |
| 10         | 1195280.66                     | 217417.69 |  |  |  |  |
| 11         | 1196274.49                     | 217338.72 |  |  |  |  |
| 12         | 1194585.77                     | 217556.08 |  |  |  |  |
| 13         | 1194411.52                     | 217598.59 |  |  |  |  |
| 14         | 1194047.14                     | 217721.27 |  |  |  |  |
| 15         | 1197219.30                     | 216957.76 |  |  |  |  |
| 16         | 1193701.32                     | 217920.24 |  |  |  |  |

### SURVEY NOTES

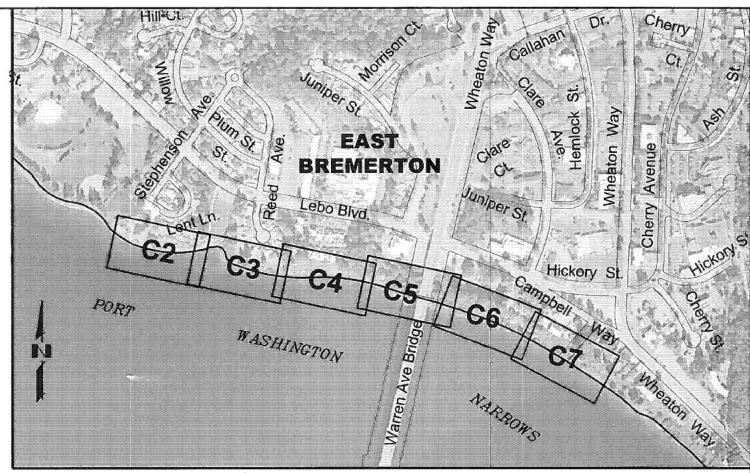
- THE CONTRACTOR SHALL MAINTAIN ALL MONUMENTATION WITHIN THE PROJECT LIMITS. MONUMENTS THAT MAY BE DESTROYED BY CONSTRUCTION SHALL BE REFERENCED AND IF DESTROYED SHALL BE RESET PURSUANT TO RCW SECTION 58.09.13 AND 332.130.030.
- MONUMENT LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE PLANS MAY NOT INCLUDE ALL MONUMENTS. FIELD LOCATION OF MONUMENTS AND REFERENCES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CITY WILL PROVIDE RECORDS OF SURVEY TO THE CONTRACTOR AFTER CONTRACT AWARD.
- REPLACEMENT MONUMENTS SHALL BE BRASS CAP IN CASE. PROVIDE SUBMITTAL OF PROPOSED PRIOR TO
- AN ELECTRONIC COPY OF THE AUTOCAD DRAWING FOR THE PLAN AND SURVEY FROM AES CONSULTANTS (JULY 2012) WILL BE FURNISHED TO THE CONTRACTOR UPON REQUEST TO ASSIST IN LAYING OUT PIPE ALIGNMENT.

#### HORIZONTAL CONTROL:

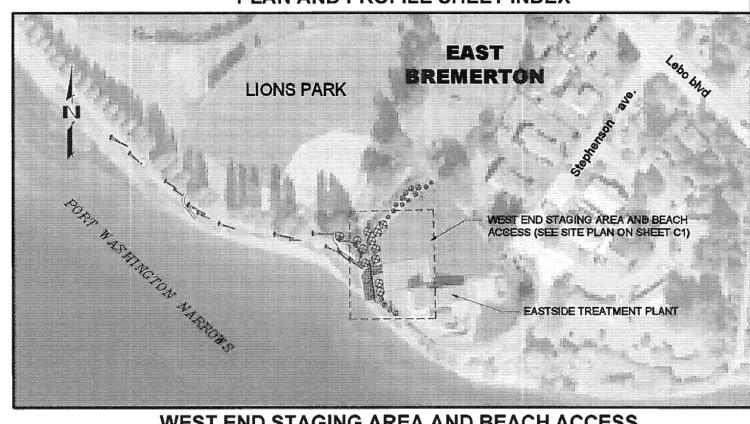
WASHINGTON STATE PLANE, NORTH NAD 83 (03)

- PT #2: SET # REBAR WITH RED I.D. CAP IMPRINTED "CONTROL 20795" IN LIONS PARK +/- 180' WEST OF EASTSIDE TREATMENT PLANT, 19.5' SE OF SE CORNER OF CONCRETE PAD FOR BENCH, 1.0' NORTH OF 4' DIAMETER BOULDER.
- N: 217825.2640, E: 1194530.5400, ELEV = 125.22 (COB DATUM)
- PT #9: SET 1" REBAR WITH RED I.D. CAP IMPRINTED "CONTROL 20795" IN LENT PARK, 34' NORTH OF STAIRS TO BEACH, 23' WEST OF SEWER MH, 4.5' WEST OF CONCRETE SIDEWALK.
- N: 217628.7744, E: 1195332.7541, ELEV = 130.36 (COB DATUM)

DATE 3/13



PLAN AND PROFILE SHEET INDEX



WEST END STAGING AREA AND BEACH ACCESS

CHECKED BY: NL

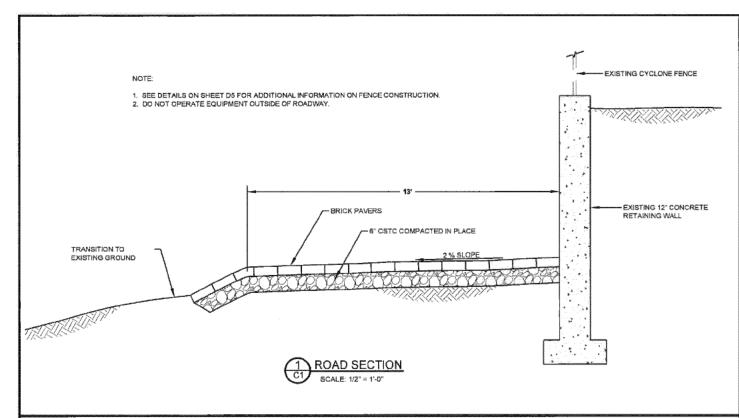
WASH. P.E. # 30749 DATE 3/13

WASH. P.E. # 34791 DATE 3/13

REVISIONS FIELD BOOK **CITY OF BREMERTON** DESCRIPTION DATE BY TWO INCHES AT FULL SCALE IF NOT SCALE ACCORDINGLY **DEPARTMENT OF PUBLIC WORKS & UTILITIES ENGINEERING DIVISION** DESIGN BY: WAD DRAWN BY: TH

**EASTSIDE BEACH MAIN REPLACEMENT** SHEET INDEX AND SURVEY CONTROL G3 3 15

DNR-00001008



#### NOTES:

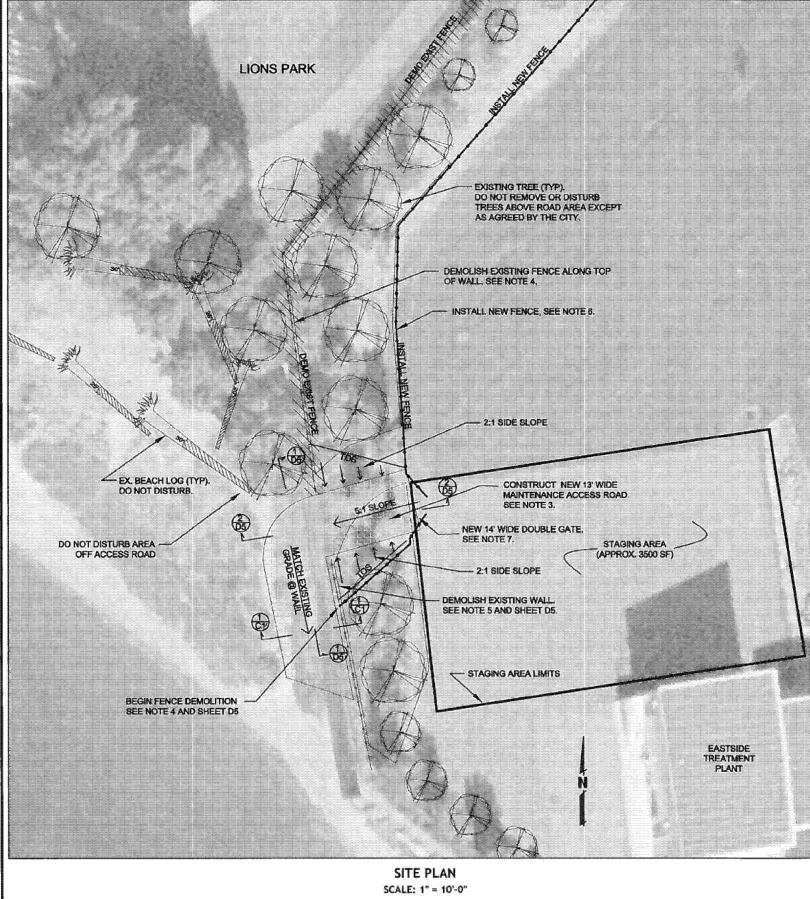
- THE WEST END STAGING AREA IS LOCATED AT THE BASE OF THE EASTSIDE TREATMENT PLANT IN EAST BREMERTON. THE SITE ADDRESS IS 2475 STEPHENSON AVENUE, BREMERTON, WA 98310. THE STAGING AREA IS APPROX. 3500 SF OF ASPHALT. SITE ACCESS IS THROUGH THE GATE ON STEVENSON COURT. CONTRACTOR MAY USE SITE FOR STORAGE OF ALL EQUIPMENT AND MATERIALS, AS WELL AS BEACH ACCESS AFTER ROAD IS CONSTRUCTED.
- DAMAGED ASPHALT IN STAGING AREA SHALL BE SAWCUT, REMOVED AND PATCHED WITH 3" THK ASPHALT OVER 6" THK CRUSHED GRAVEL.
- 3. CONSTRUCT 13' WIDE X 65' LONG THICK ACCESS ROAD AS SHOWN. ROAD SURFACING INSIDE WALLED AREA SHALL BE PERMEABLE BALLAST. TRANSITION TO PAVERS OVER CSTC AT WALL AND CONTINUE TO BEACH AS SHOWN ON THE PLANS. CONTRACTOR MAY PLACE TEMPORARY SURFACE CONSISTING OF 2"-4" QUARRY SPALLS OR PERMEABLE BALLAST AND DELAY PLACEMENT OF PAVERS UNTIL PROJECT COMPLETION. ANY ROCK DRAGGED ON THE BEACH FROM EQUIPMENT SHALL BE REMOVED DAILY AT THE DIRECTION OF THE ENGINEER.
- 4. DEMOLISH EXISTING 6' HIGH FENCE WITH BARBED WIRE AND POSTS (250 LF), STARTING AT ACCESS ROAD. OWNER WILL MARK LIMITS OF FENCE REMOVAL IN THE FIELD. FILL POST HOLES IN TOP OF WALL WITH CONCRETE.

- 5. SAW CUT AND REMOVE EXISTING CONCRETE WALL AS SHOWN ON THE PLANS TO CONSTRUCT ACCESS ROAD. EXISTING WALL IS 12" THICK. REMOVE TO MINIMUM 12" BELOW SURFACE OF NEW ACCESS ROAD. ESTIMATED 200 SF OF WALL SURFACE SCHEDULED FOR REMOVAL. GRIND AND GROUT CUT EDGE OF WALL SMOOTH.
- 6. CONTRACTOR TO INSTALL 210 LN FT OF NEW 6' HIGH FENCE WITH 18" HIGH SECURITY WIRE. MATCH EXISTING FENCE FOR DIMENSIONS AND STYLE. FOR MATERIALS AND CONSTRUCTION DETAILS, REFERENCE WSDOT STANDARD PLANS "L" SECTION AND STANDARD SPECIFICATIONS SECTION 9-16 FOR TYPE 3 FENCE AND GATE.
- DOUBLE GATE SHALL BE 14' WIDE X 6' HIGH WITH 18" HIGH SECURITY WIRE. REFERENCE STANDARD SPECIFICATIONS SECTION 9-16.1(1)E FOR GATE CONSTRUCTION AND MATERIALS. PROVIDE WITH DROP-BAR LOCKING DEVICE.
- 8. TO PREVENT THEFT AND VANDALISM BEFORE ERECTION OF NEW FENCE, AFTER WALL REMOVAL PLACE TEMPORARY 6' HIGH SECURITY FENCE AROUND STAGING AREA AND AT SITE AS NEEDED TO COMPLETELY ENCLOSE ETP SITE.

FIELD BOOK

DRAWN BY: TH

DATE 3/13



REVISIONS
DESCRIPTION
DATE BY

TWO INCHES AT FULL SCALE
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CITY OF BREMERTON
DEPARTMENT OF PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

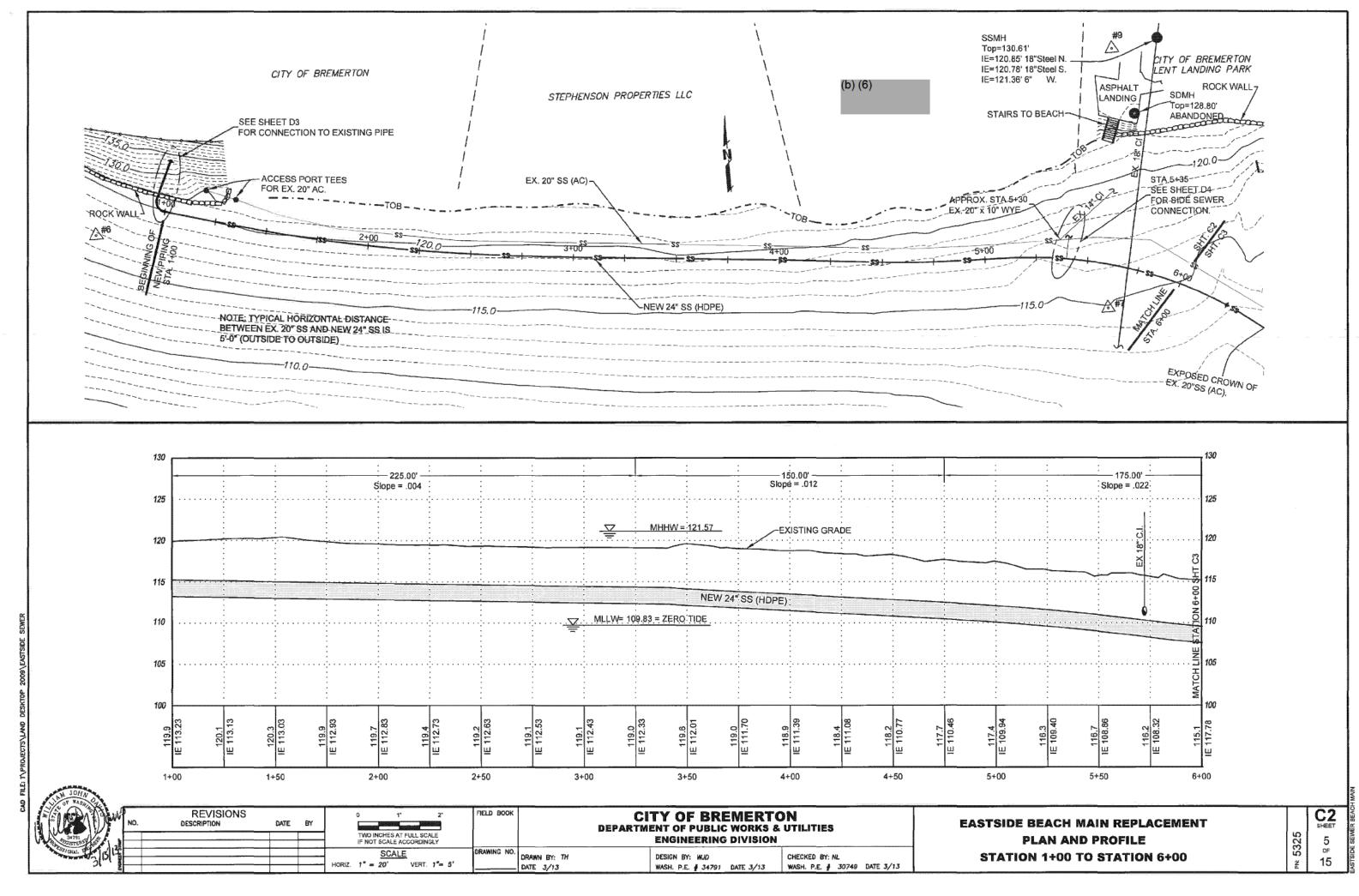
WASH. P.E. # 34791 DATE 3/13

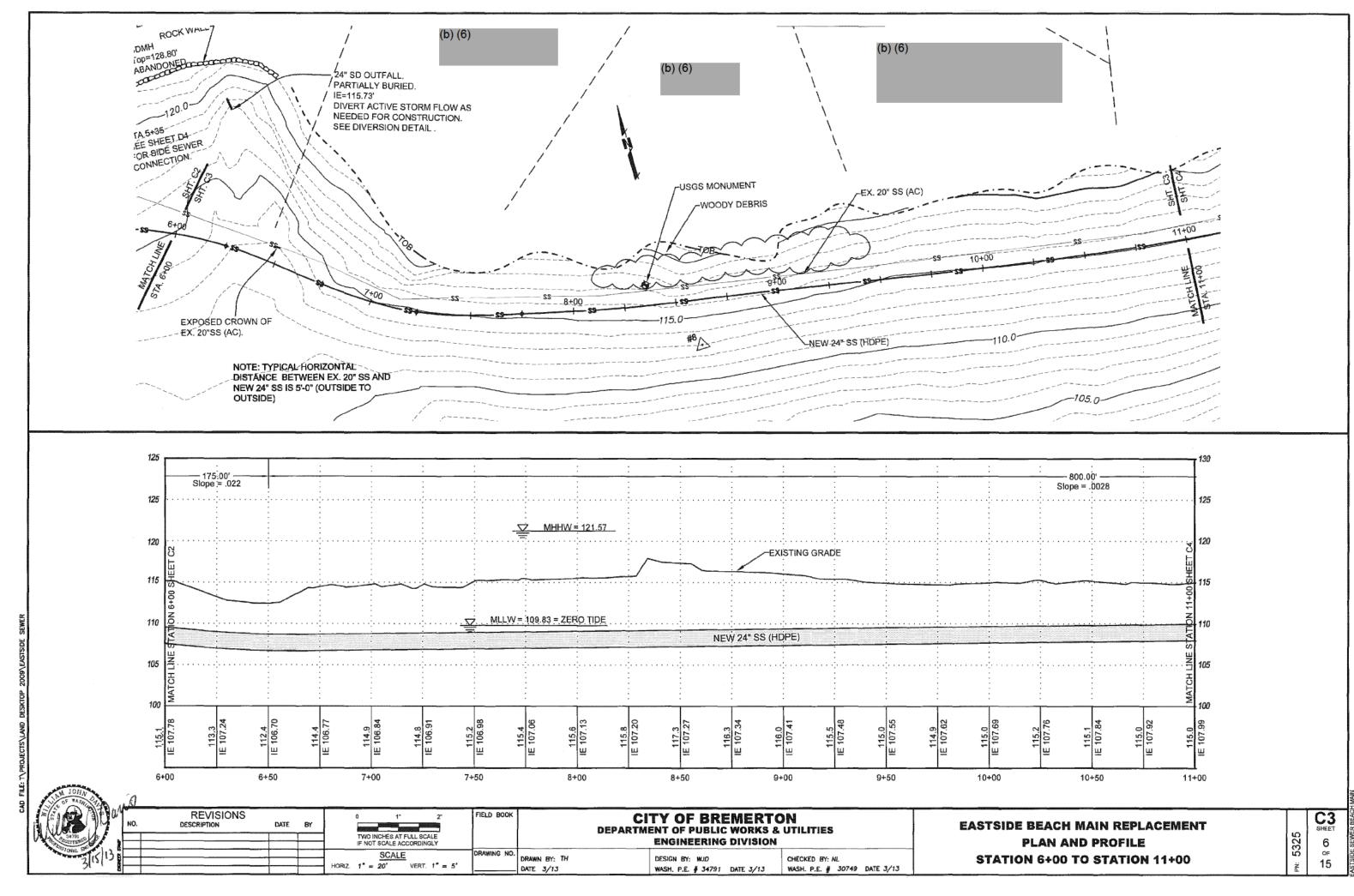
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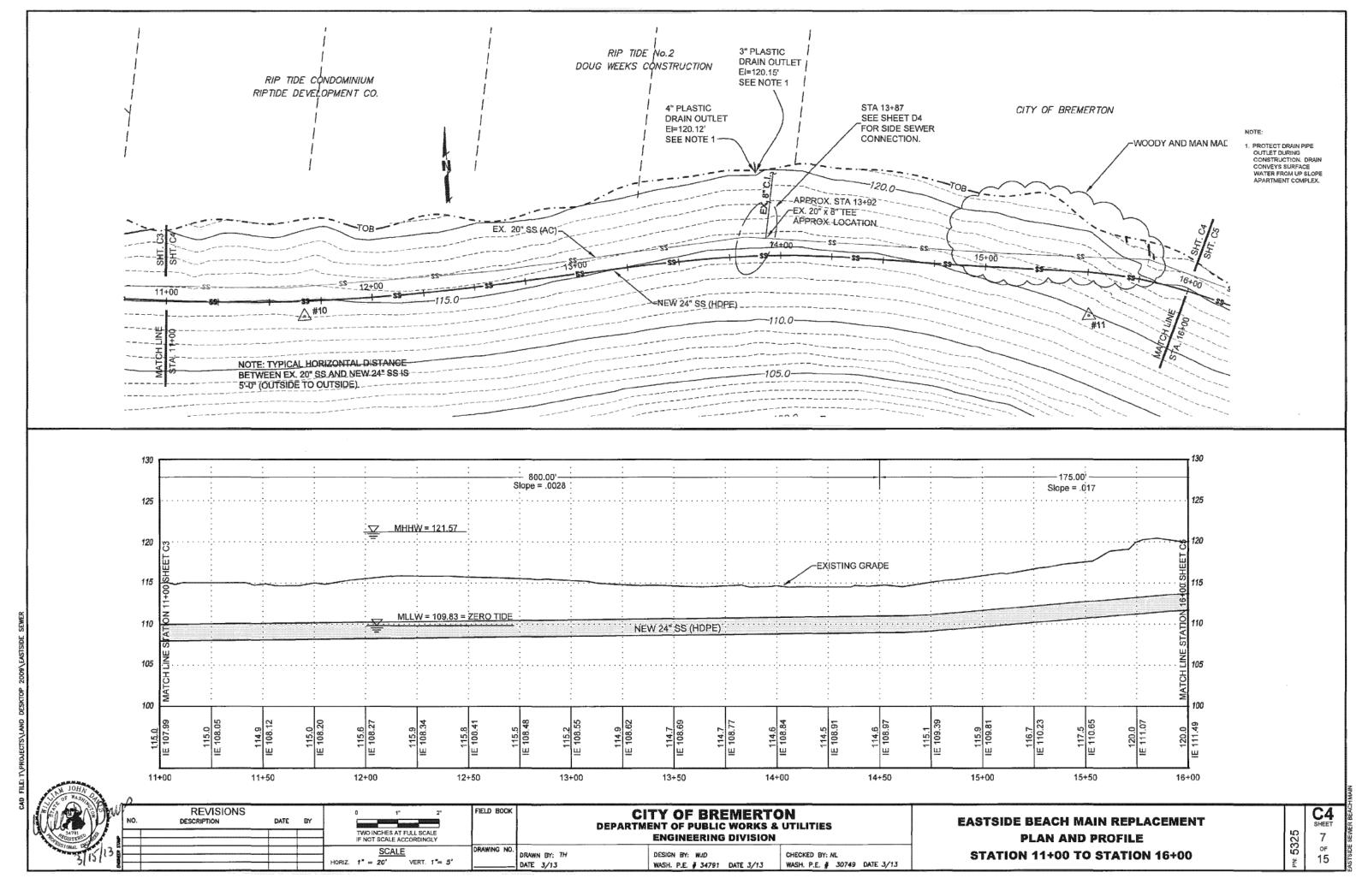
WASH. P.E. # 30749 DATE 3/13

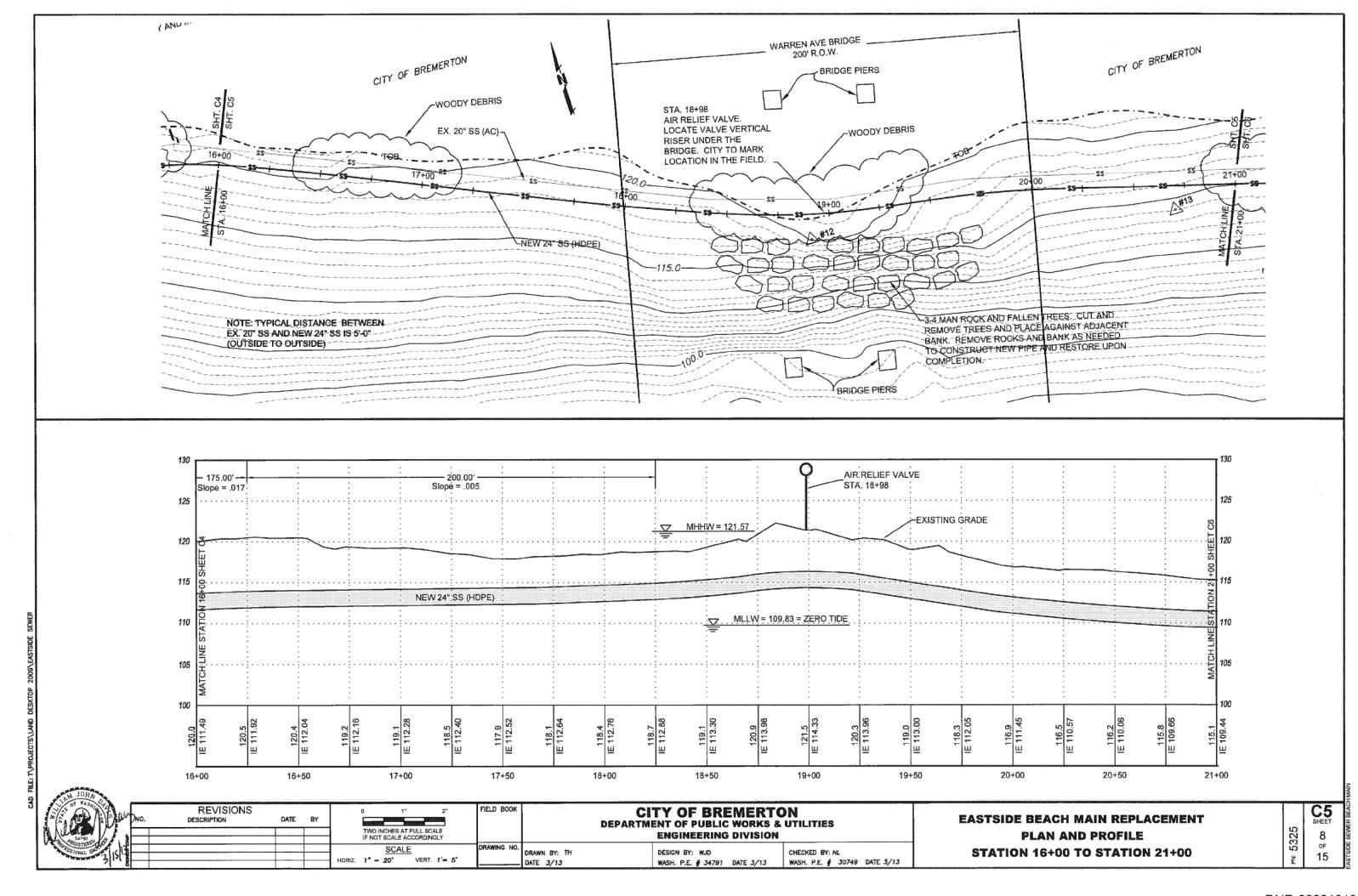
EAST SIDE BEACH MAIN REPLACEMENT
WEST END STAGING AREA
AND BEACH ACCESS ROAD

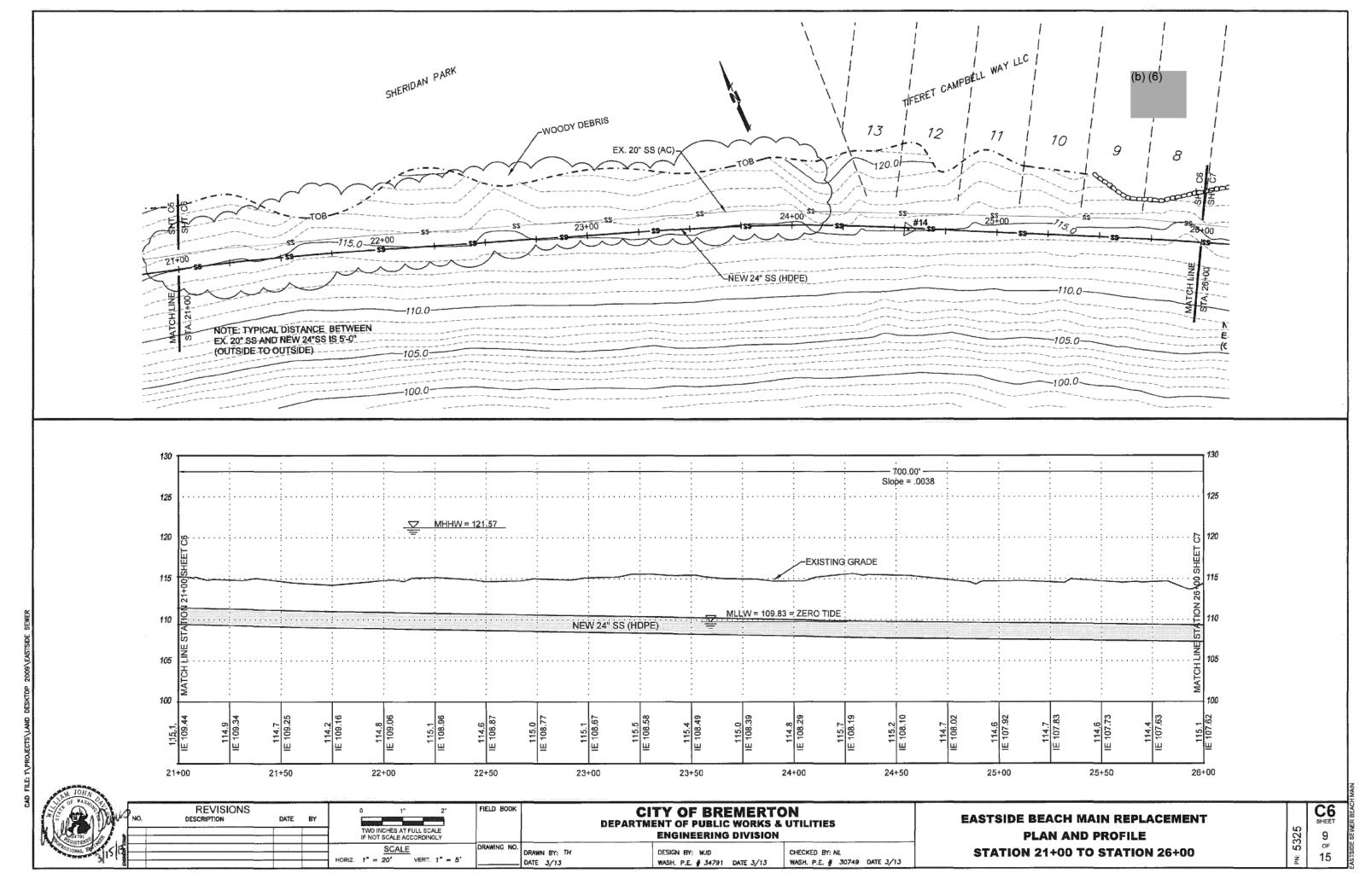
C1 SHEET 4 OF 15

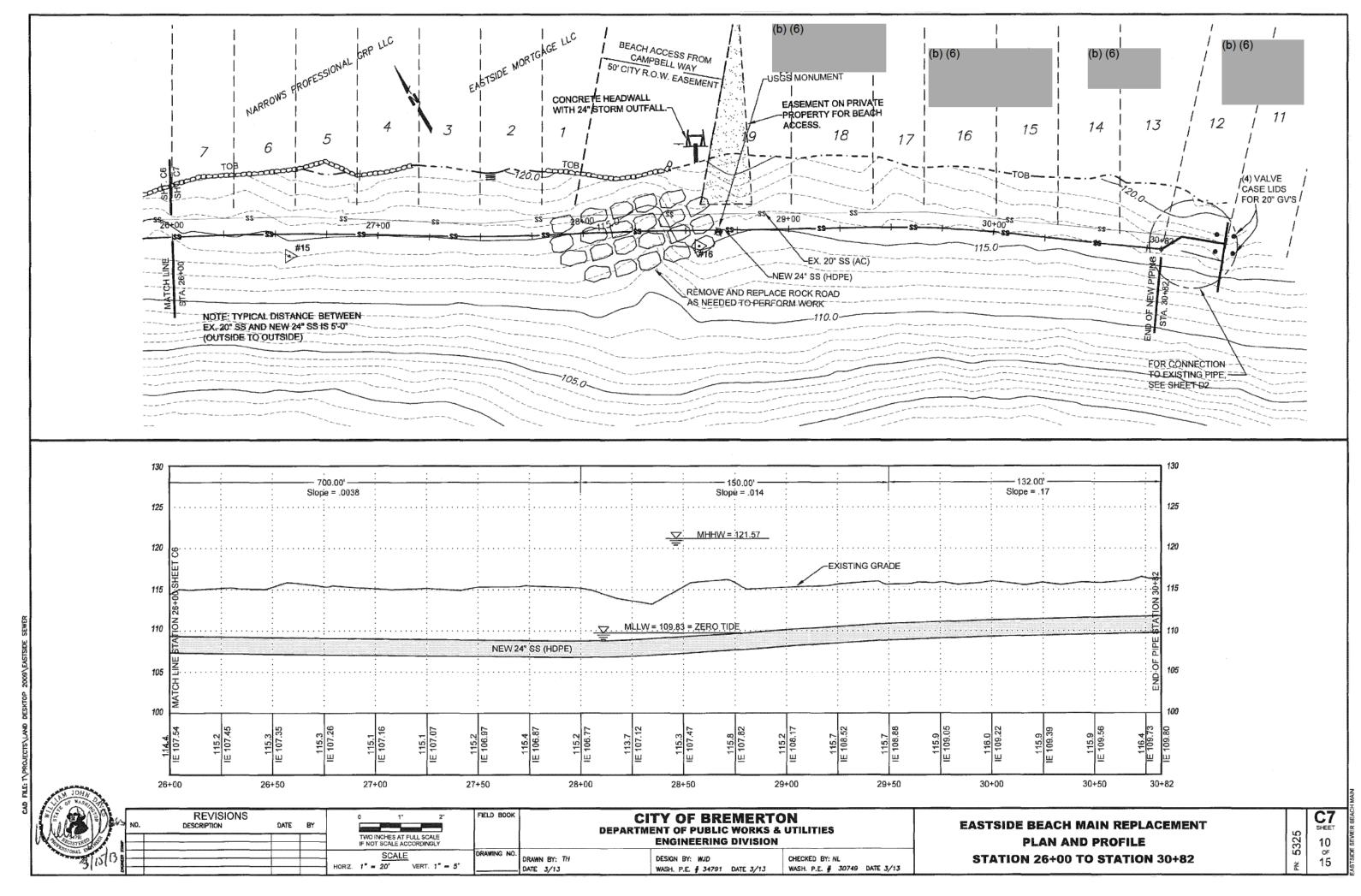


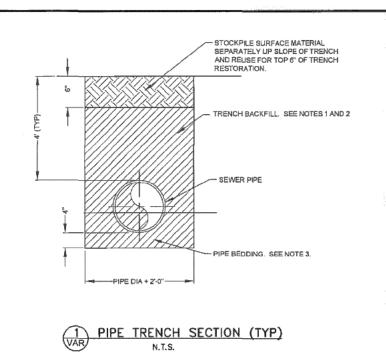


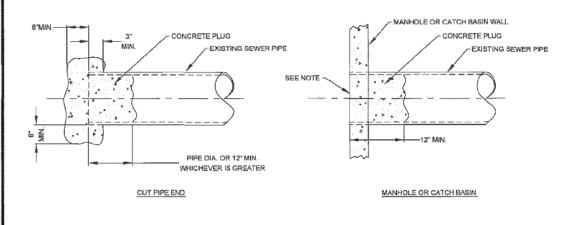


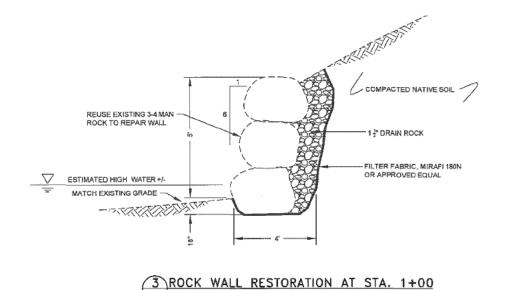










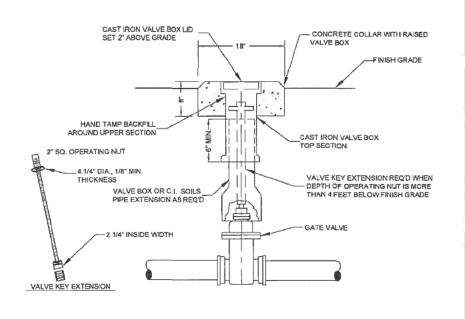


PIPE PLUG DETAILS N.T.S.

### PIPE INSTALLATION NOTES:

- 1. BACKFILL SHALL BE NATIVE MATERIAL. STOCKPILE SURFACE GRAVEL UPSLOPE OF EXCAVATION. STOCKPILE TRENCH BACKFILL DOWNSLOPE FROM EXCAVATION.
- 2. WHERE NATIVE MATERIAL IS GLACIAL TILL (HARD PAN), IMPORT SAND OR USE STOCKPILED TRENCH EXCAVATION AS BACKFILL FOR 2' FEET OVER TOP OF PIPE. GRADE SURPLUS TILL MATERIAL INTO BEACH PER NOTE 4. ESTIMATED VOLUME OF TILL MATERIAL = 150 CY.
- 3. PIPE BEDDING SHALL BE SELECT NATIVE MATERIAL AS APPROVED BY THE ENGINEER. SURFACE GRAVEL SHALL NOT BE USED AS BEDDING MATERIAL
- 4. GRADE SURPLUS MATERIAL INTO THE BEACH TO MAINTAIN A CONSTANT DOWNWARD SLOPE. TOWARDS THE WATER BODY. NO LOW SPOTS SHALL BE PERMITTED IN THE FINAL GRADE.
- 5. DO NOT TRACK OVER PIPE UNTIL FULL DEPTH BACKFILL HAS BEEN PLACED OVER PIPE.
- 6. TRENCH DEPTH VARIES PER THE PROFILE. MINIMUM COVER SHALL BE 4' UNLESS NOTED OTHERWISE ON THE PLANS.
- 7. REFERENCE SECTIONS (7-8, AND 7-17) FOR ADDITIONAL PIPE INSTALLATION REQUIREMENTS.

### HDPE COILED PIPE. MAINTAIN POSITIVE SLOPE TO AIR RELIEF VALVE. ROUTE UNDER EX. 20" AC PIPE AND INSIDE 4" DI PIPE VERTICAL POST SHALL BE 4" x 4" x 1/4" STEEL TUBE. HOT DIP GALVANIZE, EPOXY COAT INSIDE 2" AIR RELIEF VALVE -AND OUT PER 7-17.2. ENCASE BOTTOM 4' WITH 15" DIAMETER CONCRETE SLEEVE FOR BALLAST. STRAP TO VERTICAL RISER 3. CUT 3" WIDE X 6" LONG OPENING IN FACE OF TUBING FOR ACCESS TO VALVE AND FITTINGS. ROUND CORNERS AND SMOOTH ALL SHARP 2" SS COMPRESSION ~ " BRASS GATE VALVE EDGES. CUT AND SMOOTH OPENING PRIOR TO AND COUPLINGS. ELBOW OUT TO MAKE CONNECTION TO VALVE MOUNTED ON OUTSIDE ACCESS PORT. SEE NOTE 3. OF TUBE STD. C.I. VALVE 13/13/X 4" GATE VALVE W/ 2" NUT 4" HOPE ADAPTER (FL X PE) 4" HDPE 90 DEG. BEND (PE 2" HOPE 4" HDPE BRANCH SADDLE (PE) STEEL VERTICAL POST WITH CONCRETE BASE. SEE NOTE 2 NEW 24" SEWER MAIN 2" 316 SS COMPRESSION COUPLING 4" X 2" HDPE REDUCER (FL X PE) 4" X 8" X 16" CINDER BLOCK



- VALVE KEY EXTENSIONS ARE REQUIRED WHEN THE VALVE NUT IS MORE THAN
  4'-0" BELOW FINISHED GRADE, EXTENSIONS ARE TO BE A MINIMUM OF ONE (1) FOOT LONG. ONLY ONE EXTENSION TO BE USED PER VALVE.
- 2. VALVE BOX EXTENSIONS SHALL BE 5" C.I. SOILS PIPE-TYLER TY SEAL
- 3. ALL EXTENSIONS ARE TO BE MADE OF STEEL, SIZED AS NOTED, AND PAINTED WITH 2 COATS OF METAL PAINT.



REVISIONS DATE DESCRIPTION TWO INCHES AT FULL SCALE IF NOT SCALE ACCORDINGLY HORIZ. N/A VERT. N/A

FIELD BOOK

RAWING N DRAWN BY: TH

DATE 3/13

**CITY OF BREMERTON DEPARTMENT OF PUBLIC WORKS & UTILITIES ENGINEERING DIVISION** 

AIR RELEASE VALVE ASSEMBLY

DESIGN BY: WJD CHECKED BY: NL WASH. P.E. # 30749 DATE 3/13 WASH. P.E. # 34791 DATE 3/13

EASTSIDE BEACH MAIN REPLACEMENT STANDARD DETAILS

**D**1 11 15

